<u>Abstract</u>

A method for preparing lithium transitional metal oxides, comprises the steps of: preparing a carbonate precursor using the following substeps: forming a first aqueous solution containing a mixture of at least two of the ions of the following metal elements ("Meⁿ⁺"): cobalt (Co), nickel (Ni), and manganese (Mn); forming a second aqueous solution containing ions of CO_3^{2-} ; and mixing and reacting the first solution and the second solution to produce the carbonate precursor, $Ni_{1-x-y}Co_xMn_yCO_3$; and preparing the lithium transition metals oxide from the carbonate precursors using the following substeps: evenly mixing Li_2CO_3 and the carbonate precursor; calcinating the mixed material in high temperature; and cooling and pulverizing the calcinated material to obtain the lithium transition metal oxide, Li $Ni_{1-x-y}Co_xMn_yO_2$.